Work Order ID 113181 \*113181\* Page 1 February-12-14 8:50:03 AM Item ID: D3502-1 Accept \*N900040100\* Setup Start **Revision ID:** Stop **Item Name:** Support \*94\* **Start Date:** 3/14/14 **Start Oty: 24.00 Cust Item ID:** Reg'd Otv: 24.00 Required Date: 3/14/14 \*94\* **Customer:** Reference: Start Run Process Plan: \_ MLJ Date: 14-02-14 Tooling: **Approvals:** Date: Stop Date: QC: SPC (Y/N): Date: Sequence, ID/ Set Up/ **Operation** Tool ID Tool # Plan Reject Reject Accept Insp. Work Eenter ID Description Number **Run Hours** Code Qty **Oty** Stamp Draw Nbr **Revision Nbr** D3502 Rev B 100 0.00 BAND SAW \*100\* 24 限 14/02/25 ... Bandsaw Memo Jeaspa Bandsaw Cut blank 3.475 " long1 BLANK MAKES 2 PARTS 110 0.00 HAAS CNC VERTICAL MACHINING #1 \*110\* HAAS 1 0.00 1- Mill as per Folio FA649 Rev: \$\mathbb{S}\$ & Dwg D3502 Rev: \$\mathbb{S}\$ 2-Deburr HAAS CNC vertical machine #1 per dwg D3502

\*120\* QC

120

QC2- Inspect parts off machine FAI/FAIB

FKH102/26

Memo

Quality Control

0.00

0.00

DQA: Q	fut.		14/04	1	WORK ORDER NON	1-C(	ONFOR	RMANCE / U	<b>JPDATE</b>			DART
QA Closed:	CAL	Date:	14/4	1/1	)				<u>W</u>	ork Order u	odate only	
Work Orde	r: <u> </u>	315	-/	1	DISPOSITION				AGAINST DI	EPARTMENT	/PROCESS	
Part N	o. p3	502			Rework Scrap Use-as-is Suspected Unapproved		Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Desc	ription of work order update		Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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		· · · · · · · · · · · · · · · · · · ·				FA	ULT CAT	EGORY				
Landin	Bending Centre No Cracks Crimp/Kir Cuffs Crushing Heat Trea Inspection Marks/Ch Turning S	ik/Ripple t n Strip in atter equence	/Wave Tube		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Instruct Misalig Mislabe Misread Off-set Out of O	re on Incomplete/U ions Incomplete/ ned/off center led I	· · —	Outside Dim Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	tolerance ct ssing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
1	Wave/Tw	ist in Tuk	ne.		Fit/Function		Out of S	Sequence				

Work Ord February-12-1-			3181			*113	3181*							Page 2
Item ID: Revision ID: Item Name:	D3502-	l				Accept	*N900		100	)*	Setup St	4	1 4 4	S1* S2*
Start Date: Required Date Reference:	3/14/14 e: 3/14/14		Start Qty: 24.00 Req'd Qty: 24.00		*94* *94*		Cust Item I Customer:	D:						
Approvals:	Proces		n:	Date:_ Date:_		Tooling: _ SPC (Y/N):		nte:				top	*NF	₹1* ₹2*
Sequence ID/ Work Center	ID		Operation Description QC8- Inspect parts - second	nd check		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty		ject ımber	Insp. Stamp
*1.30* QC Quality Control			Memo			0.00				24	<b>Ø</b>			14/02/27
140 <b>*1 1 1 1 1 1 1 1 1 1 </b>	ý.	) Tu	Small Fab			0.00	DAS 27		c	24x		<u>.</u>	<u> </u>	14/12/28
Small Fab	<u> </u>		Mark hole po	osition usin	g DT9430Drill :	as per Dwg D3502.	-> 14/2/28	<i>,</i>		24			45	· '

150

Chemical Conversion Coat per QSI005 4.1

0.00

\*150\*
HandFinish

Memo

0.00

Hand Finishing

24 36 H.3.3

DQA:			Date:											TO A C.
						<b>WORK ORDER NON</b>	-C(	ONFO	RMANCE / L	JPDATE				AEROSPACE
QA Closed:			Date:							W	ork Order up	odate only		
Work Orde	or.					DISPOSITION				AGAINST DE	EPARTMENT,	/PROCESS		
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		Cracks	or concer	iti it	-	Broken/Damage/Defect	$\vdash$	Hardwa	uro.	-	Part Incorre		_	Femperature/Cure
	H	Crimp/Kir	nk/Rinnla	/\ <i>M</i> /2VA	-	Burrs	$\vdash$	4	ire ion Incomplete/l	Inqualified	Part Lost/Mi		-	Weld
	<u> </u>	Cuffs	ik) kibbie	y wave	-	Contamination	-	1	tions Incomplete,		Part Moved	33111g	_	Wrong Stock Pulled
	$\vdash$	Crushing			<u> </u>	Countersink		4	ned/off center		Positioned V	Vrong	'لــــ	THOUGHOUTEN
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	<del>                                     </del>	Wave/Tw	•			Fit/Function	$\vdash$	4	Sequence					

Work Ord February-12-14				*113	181*						Pag	e 3
Item ID: Revision ID: Item Name:	D3502-1 Support			Accept	*N900	<b>040</b>	100	)* ፡	Setup Star	IV	S1* S2*	
Start Date: Required Date Reference:	3/14/14 :: 3/14/14	Start Qty: 24.00 Req'd Qty: 24.00	*24* *24*		Cust Item I Customer:	D:					,	
Approvals:	Process P	lan:	Date:	Tooling: SPC (Y/N):		ate:		1	Run Star Sto	" <b>[]</b>	R1*	
Sequence ID/ Work Center I 160 *1 A A A Powdercoat Powder Coating	ID	Operation Description White Gloss(Ref:4,3.5.1)  Memo START TIME	7 94K	Set Up/ Run Hours 0.00  0.00  OVEN TEMPERATURE:	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
170 *170* QC Quality Control		QC3- Inspect Part Finish  Memo		0.00 DAS 27 959 0.00 JY/S/	1			24				<u>.</u>
180 *1 An* Packaging		Identify as per dwg & Sto	ock Location: <u>L G O T</u>	0.00 0.00				24			<b>DAS</b> - <b>33</b> 9-89	J4-03-04

Packaging

DQA:			Date:		-u. u.u.									A DT
						<b>WORK ORDER NON</b>	-CC	ONFO	RMANCE / UPI	DATE				AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Order	r:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
						Rework			Skid-tube	Crosstube	]	Water Jet		Engineering
Part No	o					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
						Use-as-is		Therr	noforming	Finishing	Rec/Sto	e/Packaging[		Other
NCR No	o. <u> </u>	w -			<del></del>	Suspected Unapproved			Large Fab	Composite	j	Supplier		
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	ا <u>ل</u>	nspection	n Strip in	Tube		Drawing		Misrea	d					
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<u> </u>	_  1	urning S	equence			Finish		Out of	Calibration					
	\	Vave/Tw	ist in Tub	е		Fit/Function		Out of	Sequence					

Work Orde February-12-14				*113	3181*							Page 4	
Item ID: Revision ID: Item Name:	D3502-	1		Accept	*N900	<u>ი</u> 40	100	)*	_			S1* S2*	
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	QC:_		Date:	_ SPC (Y/N):	Da	ate:			St	ор	*NI	R2*	
Sequence ID/ Work Center II	)	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty		eject umber	Insp. Stamp	
*1 QC Quality Control		QC21- Final Inspection -  Memo	Work Order Release	0.00						- A	<u> [[]</u>	13-5	

14.03.05

DQA:			Date:												TO A C.
						WORK ORDER NON	-CC	ONFO	RMANCE / UI	PDATE			<b></b>		AEROSPACE
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	_					Rework	1		Skid-tube	Crosstube		]	Water Jet	$\neg$	Engineering
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		ending				Bend		Folio/F	rogram			Outside Dim	ensions	$\neg$	Pressure/Forced
		entre No	t Concer	ntric		BOM/Route		Grain				Over/Under	tolerance		Set-up
		cracks				Broken/Damage/Defect		Hardwa	re			Part Incorred	ci T	_ 1	Temperature/Cure
		rimp/Kir	k/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Ur	nqualified		Part Lost/Mi	ssing	$\Box$	Weld
		Cuffs				Contamination		Instruct	ions Incomplete/U	Jnclear		Part Moved		ا∐	Wrong Stock Pulled
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,	╚	leat Trea	t			Cut Too Short		Mislabe	eled			Power Loss/	Surge		Other
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	╚	Marks/Ch	atter			Drill Holes		Off-set							
	$oldsymbol{oldsymbol{ o}}$	urning S				Finish		Out of	Calibration			·			
	l h	Nave/Tw	ist in Tuł	ne .		Fit/Function	1	Out of	Sequence						

Page 1

February-12-14 8:50:07 AM

Work Order ID: 113181

\*113181\*

Parent Item:

D3502-1

\*D3502-1\*

Parent Item Name: Support

**Start Date:** 3/14/14

Required Date: 3/14/14

**Start Qty: 24.00** 

Required Qty: 24.00

**Comments:** 

IPP Rev:A New Issue 06-07-06 JLM

IPP Rev:B Add tooling hole 07-03-28

Esr rev C added DT9430 08.11.03 EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Primary Item Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X04.00	-	Purchased	No		100	f	59.8000	0.1445	3.65052	.7		

## \*M6061T6B1 000X04 000\*

Location	Loc Qty	Loc Code
MAT003	59.8	
124681	24	
125272	1.8	
M126160	10	
<b>→</b> M127797	24	3.651 F.K (4/02/25

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DQA:			Date:												TOAPT
						WORK ORDER NON-	-CC	ONFO	RMANCE / UF				_		AEROSPACE
QA Closed:			Date:								W	ork Order up	date only		
Work Orde	er:					DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS		
	_				_	Rework			Skid-tube	Crosstube			Water Jet		Engineering
Part N	lo.					Scrap			Machining	Small Fab		Pro	d. Eng. Coor.		Quality
		·			_	Use-as-is			noforming	Finishing			re/Packaging		Other
NCR N	۱o					Suspected Unapproved			Large Fab	Composite			Supplier		
Root					Desci	ription of work order update		nitial	Acti	ion		Sign &		_	
Cause		Date	Step	Qty	<i>D</i> 0301	or non-conformance		ief Eng		iption		Date	Verification	<b>1</b>	QC Inspector
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	$\vdash$	Cracks			<u> </u>	Broken/Damage/Defect		Hardwa				Part Incorre	i i		Temperature/Cure
	-	Crimp/Kir	nk/Ripple	:/Wave	_	Burrs	<u> </u>	1	ion Incomplete/Un	-		Part Lost/Mi	· ·		Weld
	-	Cuffs				Contamination		4	tions Incomplete/U	Inclear		Part Moved	<u> </u>		Wrong Stock Pulled
	-	Crushing				Countersink	<u> </u>	1	gned/off center		<u> </u>	Positioned V	r		,
	Н	Heat Trea				Cut Too Short		Mislab			L	Power Loss/	Surge [		Other
	-	Inspection	-	Tube	<u> </u>	Drawing	_	Misrea							
	-	Marks/Ch			$\vdash$	Drill Holes	lacksquare	Off-set					·		
	-	Turning S			<u> </u>	Finish	$\vdash$	1	Calibration						
	<u> </u>	Wave/Tw	ust in Tub	oe e		Fit/Function	1	Out of	Sequence			*			

DART AEROSPACE LTD	Work Order:	11.3181
Description: Support	Part Number:	D3502-1
Inspection Dwg: D3502 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R1.590	+/-0.010	1.590	7		F4-04	Vern
R1.177	+0.005/-0.000	1-177	7		N	4
0.130	+/-0.010	.129	7		,	١
0.080	+/-0.010	୍ତ୍ର	7		١	h
0.928	+/-0.010	,929	7		ħ	
0.100	+/-0.010	,100	>		`	*
0.100	+/-0.010	<b>1</b> 0/9	7		h	4
1.39	+/-0.030	1.395	7		<i>p</i>	- A
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				,		

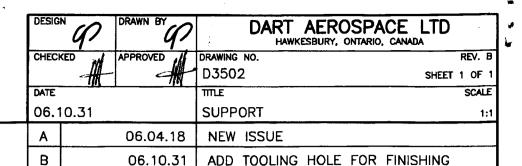
DAS

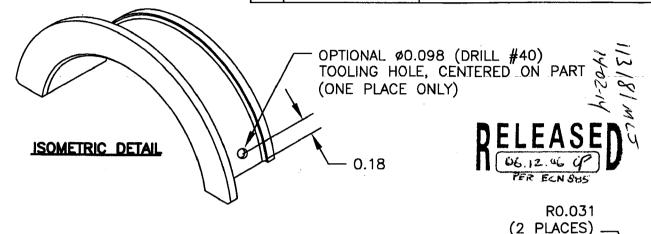
Measured by: Audited by: 40 Prototype Approval: N/A

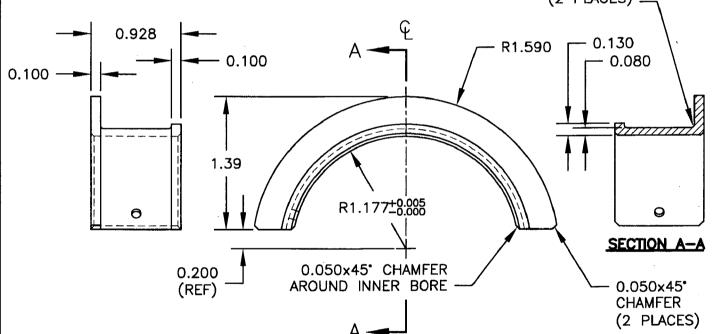
Date: 14/02/26 Date: 14/02/27 Date: N/A

Rev	Date	Change	Revised by	Approved
Α	06.09.01	New Issue	KJ/JLM ,	
В	07.03.29	Dwg Rev. updated	KJ/JLM of	
			• ()	_ /~/









## D3502-1 SUPPORT

- 1) MATERIAL: 6061-T6 ROUND BAR (REF DART SPEC. M6061T6R)
- 2) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 (REF. X.XXX = ±0.010, X.XX = ±0.030) UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3

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